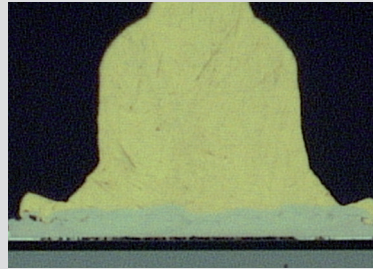
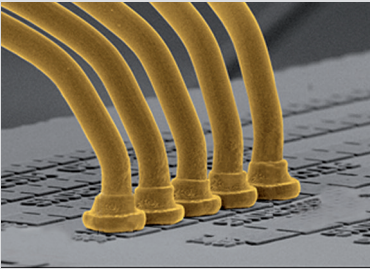


Au HD3 Gold Bonding Wire for Universal Use and Low Loop



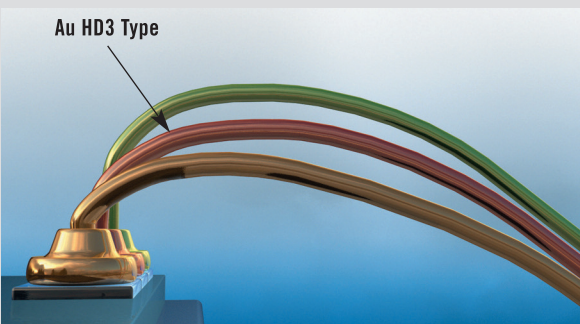
This wire type contains other doping elements apart from the well established beryllium. Due to this doping, type HD3 has a higher strength, loop stiffness and thermal stability than type HD2. Loop stability can also be guaranteed with thinner wire diameters and in flatter and/or long loops.

Areas of application

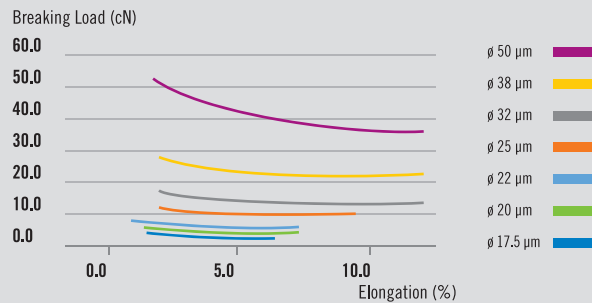
- Flat integrated circuits (TSOP, TQFP, VSSOP, IC-cards,...)
- Other flat product applications

Au HD3 Benefits

- Low loop wire type
- Soft type bonding wire of high ductility
- Exact loop guiding
- Mid strength type
- Well proven loop stiffness and thermal stability
- Suitable for all high performance bonding machines
- For normal and high speed assembling



Breaking Load vs. Elongation



Recommended Technical Data of Au HD3

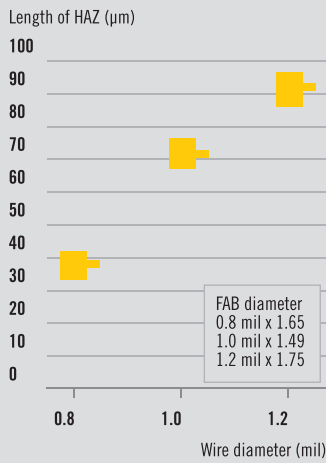
Diameter	Microns (µm)	17.5	20	23	25	30	33	38	50
	Mils	0.7	0.8	0.9	1.0	1.2	1.3	1.5	2.0
Elongation	%	2-5	2-6	2-7	2-8	3-8	3-8	3-10	3-12
Breaking Load	cN	> 4	> 5	> 7	> 9	> 13	> 16	> 21	> 34

For other diameters, please contact Heraeus Bonding Wires sales representative.

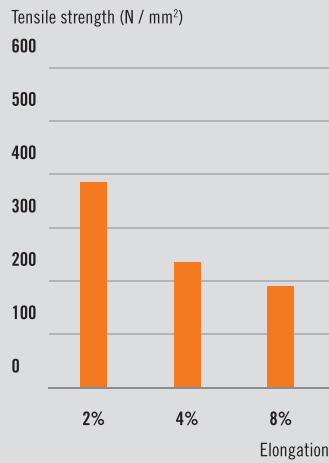
HD3 Characteristics for 25 µm diameter

Non-Gold Elements	< 100 ppm	Heat Conductivity	3.12 W / cmK
Elastic Modulus	> 60 GPa	Electrical Resistivity	2.3 µΩ-cm
Heat Affected Zone (HAZ)	190 – 230 µm	Coeff. of Linear Expansion (20 – 100 °C)	14.2 ppm / K
Melting Point	1063 °C	Fusing Current for 25 µm, dia 10 mm length (in air)	0.369 A
Density	19.32 g / cm³		

Heat Affected Zone (HAZ)



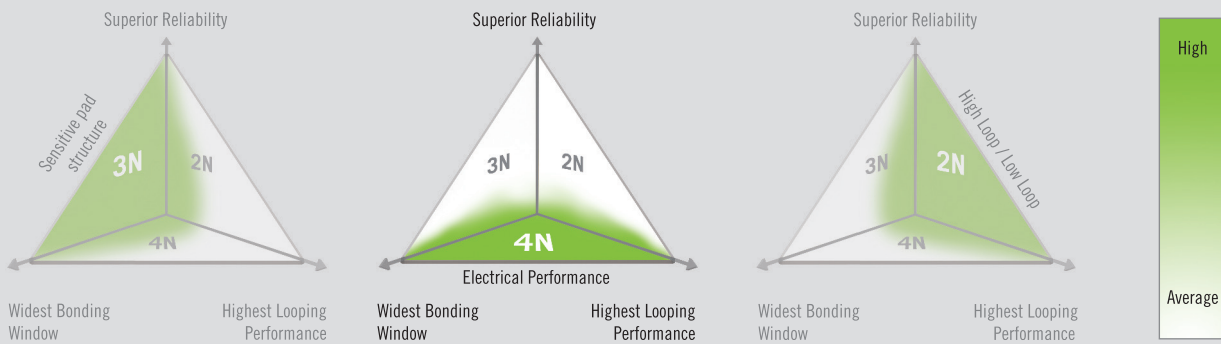
Breaking Load vs. Elongation



Neck Strength



Gold Wire Segmentation by Properties



Americas
Phone +1 610 825 6050
electronics.americas@heraeus.com

Asia Pacific
Phone +65 65717649
electronics.apac@heraeus.com

China
Phone +86 53 5815 9601
electronics.china@heraeus.com

Europe, Middle East and Africa
Phone +49 6181 35 4370
electronics.emea@heraeus.com

The descriptions and engineering data shown here have been compiled by Heraeus using commonly-accepted procedures, in conjunction with modern testing equipment, and have been compiled as according to the latest factual knowledge in our possession. The information was up-to date on the date this document was printed (latest versions can always be supplied upon request). Although the data is considered accurate, we cannot guarantee accuracy, the results obtained from its use, or any patent infringement resulting from its use (unless this is contractually and explicitly agreed in writing, in advance). The data is supplied on the condition that the user shall conduct tests to determine materials suitability for particular application. The Heraeus logo, Heraeus, Condura®, DTS®, Die Top System® and the Condura, DTS, Die Top System figurative mark are trademarks or registered trademarks of Heraeus Holding GmbH or its affiliates. All rights reserved.